


Product datasheet

Anti-Estrogen Related Receptor alpha antibody - N-terminal ab137489

[2 Images](#)

Overview

Product name	Anti-Estrogen Related Receptor alpha antibody - N-terminal
Description	Rabbit polyclonal to Estrogen Related Receptor alpha - N-terminal
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, WB
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat, Cow, Dog, Pig 
Immunogen	Synthetic peptide, corresponding to a region within N terminal amino acids 1-45 of Human Estrogen Related Receptor alpha (Uniprot ID: P11474). Run BLAST with ExPASy Run BLAST with NCBI
Positive control	293T, A431, H1299, HeLaS3, HepG2 and Raji whole cell lysates. IF/ICC: HeLa cell line.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.00 Preservative: 0.01% Thimerosal (merthiolate) Constituents: 1.21% Tris, 0.75% Glycine, 20% Glycerol
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab137489** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use a concentration of 5 µg/ml.
WB		1/500 - 1/3000. Predicted molecular weight: 46 kDa.

Target

Function

Binds to an ERR-alpha response element (ERRE) containing a single consensus half-site, 5'-TNAAGGTCA-3'. Can bind to the medium-chain acyl coenzyme A dehydrogenase (MCAD) response element NRRE-1 and may act as an important regulator of MCAD promoter. Binds to the C1 region of the lactoferrin gene promoter. Requires dimerization and the coactivator, PGC-1A, for full activity. The ERRalpha/PGC1alpha complex is a regulator of energy metabolism.

Sequence similarities

Belongs to the nuclear hormone receptor family. NR3 subfamily. Contains 1 nuclear receptor DNA-binding domain.

Post-translational modifications

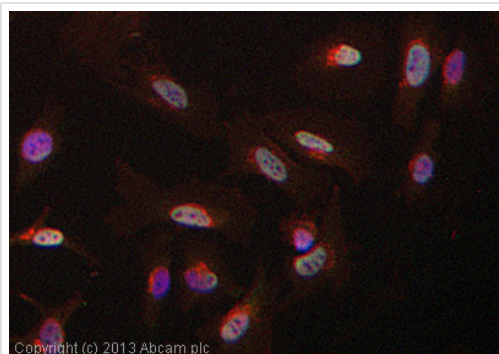
Phosphorylation on Ser-19 enhances sumoylation on Lys-14 increasing repression of transcriptional activity.

Sumoylated by SUMO2. Main site is Lys-14 which is enhanced by phosphorylation on Ser-19, cofactor activation, and by interaction with PIAS4. Sumoylation enhances repression of transcriptional activity, but has no effect on subcellular location nor on DNA binding.

Cellular localization

Nucleus.

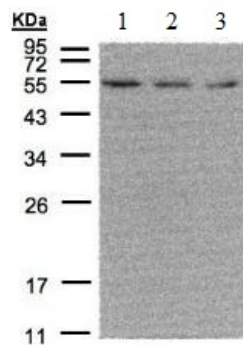
Images



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Immunocytochemistry/ Immunofluorescence - Anti-Estrogen Related Receptor alpha antibody - N-terminal (ab137489)

ab137489 stained HeLa cells. The cells were 4% formaldehyde fixed for 10 minutes at room temperature and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1 hour at room temperature to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab137489 at 5µg/ml) overnight at +4°C. The secondary antibody (pseudo-colored green) was Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed (ab150081) used at a 1/1000 dilution for 1 hour at room temperature. Alexa Fluor® 594 WGA was used to label plasma membranes (pseudo-colored red) at a 1/200 dilution for 1 hour at room temperature. DAPI was used to stain the cell nuclei (pseudo-colored blue) at a concentration of 1.43µM for 1 hour at room temperature.



Western blot - Anti-Estrogen Related Receptor alpha antibody - N-terminal (ab137489)

All lanes : Anti-Estrogen Related Receptor alpha antibody - N-terminal (ab137489) at 1/500 dilution

Lane 1 : 293T whole cell lysate

Lane 2 : A431 whole cell lysate

Lane 3 : H1299 whole cell lysate

Lysates/proteins at 30 µg per lane.

Predicted band size: 46 kDa

12% SDS PAGE

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